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EXAMINER

MURPHY, DILLON J

ART UNIT PAPER NUMBER

2624

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,275

Applicant(s)

HAINES, ROBERT B.

Examiner

Dillon J. Murphy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-8,11-14,17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-8,11-14,17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

DOUGLAS Q. TRAN
PRIMARY EXAMINER

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

- This action is responsive to the amendment filed on October 17, 2005.
- Claims 1, 2, 5-8, 11-14, 17, and 18 are pending. Claims 3, 4, 9, 10, 15, and 16 are canceled.
- Replacement figures 6, 7, and 9 were not received.
- Amendments to the specification are acknowledged and accepted.

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 17 (page 10 of amendment) has been renumbered claim 7.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1, 5-7, 11-13, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biegelsen et al. (US 6335084), Ueda et al. (US 5801722), and Brinkman (US 6598783), hereafter referred to as Biegelsen, Ueda, and Brinkman.

Regarding claim 1, Biegelsen teaches a method for sensing data from a sheet of print media, the method comprising:

Sensing a media marking on an edge of a sheet of print media if the media marking is imprinted on the edge of the sheet (Biegelsen, col 2, ln 7-19, edge has indicia arranged to form a code that identifies sheet characteristics, and code reader reads indicia. See fig 1 and 2 for code imprinted on edge of sheet), the media marking comprising media parameter information that corresponds to the sheet of print media (Biegelsen, col 5, ln 9-12, code reader reads mark and determines media type); and

Configuring an imaging device based on the media parameter information to form an image on the sheet of print media (Biegelsen, col 6, ln 28-38, image recording parameter device reads media parameters and configures imaging device based on the type of image recording media being used).

Biegelsen does not disclose expressly a method for sensing data from a sheet of print media further comprising sensing a media marking on a face of a sheet of print media if the media marking is imprinted on the face of the sheet. Ueda, however, teaches a method for sensing data from a sheet comprising sensing a media marking on a face of a sheet of print media if the media marking is imprinted on the face of the sheet (Ueda, col 8, ln 48-58, face of paper may be printed with a mark, e.g. a barcode or invisible mark, to correspond to media parameters. Examples of parameters are

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given in col 8, ln 8-21. Figure 6, photosensor #60 and #64 oriented perpendicular to transport path #6, therefore mark is on face of media). Additionally, Ueda teaches the media marking comprises media parameter information that corresponds to the sheet of print media (Ueda, col 8, ln 48-49, wherein mark corresponds to kind of paper), and Ueda teaches the method further comprises configuring an imaging device based on the media parameter information to form an image on the sheet of print media (Ueda, col 8, ln 54-58, wherein printer is configured based on detected media parameter).

Biegelsen and Ueda are combinable because they are from a similar field of endeavor of encoding media parameters on a sheet of print media and configuring the print device based upon sensed parameters. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the method of Ueda comprising sensing a media marking on a face of a sheet of print media, the media marking comprising media parameter information corresponding to the sheet of print media, and configuring an imaging device based upon the media parameter information to form an image with the method of Biegelsen comprising sensing a media marking on an edge of a sheet of print media, the media marking comprising media parameter information corresponding to the sheet of print media, and configuring an imaging device based upon the media parameter information to form an image. The motivation for doing so was suggested by Brinkman, who also encodes information on an object with barcodes. In Biegelsen (col 3, ln 54-57), Ueda (col 8, ln 50-51), and Brinkman (col 4, ln 33-38), the references use barcodes to encode information on a medium. Brinkman teaches placing a barcode on both the face and edge of the medium

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(Brinkman, fig 7c, barcode labels #41 are affixed to both face and edge of medium).

The motivation for doing so would have been to use several duplicate barcode labels to be viewable or able to be scanned from different orientations (Brinkman, col 6, ln 43-47), to provide a method of marking an object for easily locating information that anyone (or any scanner) can quickly find (Brinkman, col 2, ln 23-26), as well as to provide redundant means to identify each sheet as being a particular type of image recording media (Biegelsen, col 4, ln 63-65). By identifying the correct media type, an imaging method is provided which can produce high quality image onto any kinds of recording papers and which can save time, paper, and ink (Ueda, col 2, ln 24-28). Therefore, it would have been obvious to combine Ueda as per the teaching of Brinkman with Biegelsen to obtain the invention as specified in claim 1.

Regarding claim 5, which depends from claim 1, the combination of Biegelsen, Ueda, and Brinkman teaches a method for sensing data from a sheet of print media, the method further comprising:

Determining whether to pull the sheet of print media from a particular media supply bin based on the media parameter information (Biegelsen, col 6, ln 7-27, in image recording apparatus #210 of figure 10, four different trays are loaded with four different types of media: transparencies, company letterhead, standard paper with a three-hole pattern, and cardstock. Upon print request, imaging device determines type of image recording media is in each tray and prints without having to manually change types of recording media or perform any manual collation).

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Regarding claim 6, which depends from claim 1, the combination of Biegelsen, Ueda, and Brinkman teaches a method for sensing data from a sheet of print media, the method further comprising:

Determining if an appropriate print media is available in the imaging device to perform a particular imaging job based on the media parameter information (Biegelsen, col 5, ln 9-17, device determines whether image recording media in tray is identified as the selected type of image recording media. If identified media is correct type, media is pulled from tray and image is formed on the recording media).

Claim 7 recites identical features as claim 1 except claim 7 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 1 are equally applicable to claim 7. Applicant's attention is further invited to Ueda, fig 7, Non-volatile RAM #12 comprises Resolution Memory #12a and Paper Characteristic Memory #14a, coupled with CPU #11 and Recording Paper Characteristic Detector #16 for sensing media parameters and acting appropriately. Storing printer parameters by CPU #11 in RAM #12 is indicative of computer-executable instructions, especially when connected with an external CPU #50 in an external device such as a personal computer, col 4, ln 35-37 of Ueda.

Regarding claim 11, which depends from claim 7, claim 11 recites identical features as claim 5 except claim 11 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 5 are equally applicable to claim 11.

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Regarding claim 12, which depends from claim 7, claim 12 recites identical features as claim 6 except claim 12 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 7 are equally applicable to claim 12.

Regarding claim 13, the combination of Biegelsen, Ueda, and Brinkman further teaches an imaging device (Biegelsen, Figure 8, #110 image recording apparatus illustrated as a photocopier, but can also be a printer, a facsimile machine, and offset print press, col 4, ln 54-59, and Ueda, figure 7, #1, printer) comprising:

A memory comprising computer-executable instructions for sensing data from a sheet of print media, and

A processor that is operatively coupled to the memory (Ueda, Figure 7, Non-volatile RAM #12 comprises Resolution Memory #12a and Paper Characteristic Memory #14a, coupled with CPU #11 and Recording Paper Characteristic Detector #16 for sensing media parameters and acting appropriately. Storing printer parameters by CPU #11 in RAM #12 is indicative of computer-executable instructions, especially when connected with an external CPU #50 in an external device such as a personal computer, col 4, ln 35-37), the processor being configured to fetch and execute the computer-executable instructions from the memory, the computer-executable instructions comprising instructions for:

Sensing a media marking on a face of a sheet of print media if the media marking is imprinted on the face of the sheet (Ueda, col 8, ln 48-58, face of media may be printed with a mark, e.g. a barcode or invisible mark, to correspond to media parameters. Examples of parameters are given in col 8, ln 8-21. Figure 6, photosensor

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#60 and #64 oriented perpendicular to transport path #6, therefore mark is on face of media) and sensing a media marking on an edge of a sheet of print media if the media marking is imprinted on the edge of the sheet (Biegelsen, col 2, ln 7-19, edge has indicia arranged to form a code that identifies sheet characteristics, and code reader reads indicia. See fig 1 and 2 for code imprinted on edge of sheet), the media marking comprising media parameter information that corresponds to the sheet of print media (Biegelsen, col 5, ln 9-12, code reader reads mark and determines media type. Also see Ueda, col 8, ln 48-49, wherein mark corresponds to kind of paper); and

Configuring an imaging device based on the media parameter information to form an image on the sheet of print media (Biegelsen, col 6, ln 28-38, image recording parameter device reads media parameters and configures imaging device based on the type of image recording media being used. Also see Ueda, col 8, ln 54-58, wherein printer is configured based on detected media parameter).

Regarding claim 17, which depends from claim 13, the combination of Biegelsen, Ueda, and Brinkman further teaches an imaging device comprising a memory and a processor for executing a program for:

Determining whether to pull the sheet of print media from a particular one bin of a plurality of media supply bins based on the media parameter information (Biegelsen, col 6, ln 7-27, in image recording apparatus #210 of figure 10, four different trays are loaded with four different types of media: transparencies, company letterhead, standard paper with a three-hole pattern, and cardstock. Upon print request, imaging device

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determines type of image recording media is in each tray and prints without having to manually change types of recording media or perform any manual collation).

Regarding claim 18, which depends from claim 13, the combination of Biegelsen, Ueda, and Brinkman further teaches an imaging device comprising a memory and a processor for executing a program for:

Determining if an appropriate print media is available in the imaging device to perform a particular imaging job based on the media parameter information (Biegelsen, col 5, ln 9-17, device determines whether image recording media in tray is identified as the selected type of image recording media. If identified media is correct type, media is pulled from tray and image is formed on the recording media).

Claims 2, 8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biegelsen et al. (US 6,335,084), Ueda et al. (US 5,801,722), Brinkman (US 6,598,783), and Meunier et al. (US 6,582,138), hereafter referred to as Biegelsen, Ueda, Brinkman, and Meunier.

Regarding claim 2, which depends from claim 1, the combination of Biegelsen, Ueda, and Brinkman teaches a method of sensing data from a sheet of print media comprising sensing a media marking on a face and an edge of print media, the media marking comprising media parameter information that corresponds to the sheet of print media, and configuring an imaging device based on the media parameter information to form an image on the sheet, as explained above in the rejection of claim 1. Although the combination of Biegelsen, Ueda, and Brinkman uses media marks such as

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barcodes (Biegelsen, col 3, ln 54-62, media mark is bar code, visible or invisible, with invisible mark formed using invisible ink such as a fluorescent ink), the combination does not disclose expressly wherein the mark is an ink-bleed media marking. Meunier discloses a visible ink-bleed media mark on the edge of the media sheet used for encoding media parameters and identifying the document (Meunier, col 3, ln 3 and 4, also see figure 1, #12, edge marking is a barcode. See also col 12, ln 6-14, wherein the media mark is ink-bleed). Additionally, the media parameter information (Meunier, col 12, ln 40-43, ink penetration measurements may be stored) may be printed on any surface of the paper, including the face (Meunier, col 13, ln 20-25).

Biegelsen, Ueda, Brinkman, Meunier are combinable because they are from the same field of endeavor of managing media having information recorded thereon. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the method of using the explicit ink-bleed media marking of Meunier in combination with the previously taught media marking, sensing the media mark corresponding to the sheet media, and configuring an imaging device based on the media parameter information method of Biegelsen, Ueda, and Brinkman. The suggestion for doing so would be to facilitate the marking process by printing on the face of the paper and allowing the ink to bleed through to the edge (Meunier, col 12, ln 10-12), and the motivation would have been to imprint media marks to media after manufacturing with common programs and imaging devices (Meunier, col 12, ln 6-10). Therefore, it would have been obvious to combine Meunier with the aforementioned

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combination of Biegelsen, Ueda, and Brinkman to obtain the invention as specified in claim 2.

Regarding claim 8, which depends from claim 7, claim 8 recites identical features as claim 2 except claim 8 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 2 are equally applicable to claim 8.

Regarding claim 14, which depends from claim 13, the combination of Biegelsen, Ueda, Brinkman, and Meunier further teaches an imaging device wherein the media marking is an ink-bled media marking (Meunier, col 3, ln 3 and 4, also see figure 1, #12, edge marking is a barcode. See also col 12, ln 6-14, wherein the media mark is ink-bled).

Response to Arguments

Applicant's arguments, see page 13, ln 12-19, filed October 17, 2005, with respect to the rejections of claims 1, 7, and 13 under 35 U.S.C 102(e) (claim 1) and 35 U.S.C. 103(a) (claims 7 and 13) have been fully considered and are persuasive. The Biegelsen reference does not disclose imprinting and sensing a media marking on the face of a sheet. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ueda for the teaching of imprinting and sensing a media mark on the face of a sheet, and in view of Brinkman for teaching motivation.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

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combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, imprinting a media marking on both the face and edge of a sheet would provide redundant scanning means, and the common motivation to provide robust, i.e. redundant, methods and apparatus would apply. Additionally, the Brinkman reference is used in the combination of Biegelsen and Ueda to show that imprinting a code on the edge and face of a medium was well known at the time of the invention, and provides motivation to combine.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon J. Murphy whose telephone number is (571) 272-5945. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DOUGLAS Q. TRAN
PRIMARY EXAMINER



DJM

